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PUBLIC
ASTOR, L
TILDEN FO
R

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IS SLOANE, M.D.

f the British Museum.

agen, 104 Beekman Street. N.Y.

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PR(

SAYLES, MILLE

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4. " canadum,
5. Coccinella borealis,

PLA

6. Copris carnifex,
7. Passalus cornutus,
8. Cetonia Inda,
9. Amphicoma vulpina,
10. Silpha americana,

PLA

11. Elater occulatus,
12. " noctilucus,
13. Clytus pictus,
14. Desmocerus palliatus,
15. Calandra Palmarum,
16. Eumolpus auratus,

PLA

17. Cicada Septemdecim,
18 " Tibicen.
19. Larva Cicadæ,
20. Coreus tristis,
21. Membracis,

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in the seventeenth century, l
during the reign of Elizabetl
Treasurer Salisbury and Lo
and in 1620 was on board
against the Algerines. Ava
ing his favourite studies, he c
mostly plants from Barbary
years after, we find him sett
brated Botanic Garden. Tl
the wonder of the age, and
much frequented by the prin
and among the names of thc
and Queen, Archbishop Lau
&c.

John Tradescant died ab
became extinct, bestowed th
ally increased it in various
to the University of Oxford,
receive it. This was imme
called the Ashmolean Muse

---

* The Spider-wort is known i
cantia Virginica," in honour of hi

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tion, known under the name of "Museum
718, and his Museum was purchased by

h and youngest son of Alexander Sloane,
n the county of Down, Ireland, was born
Being naturally of a delicate constitution,
e usual boisterous pursuits of youth, he
se to the study of Nature at a very early
d on following the medical profession, en-
es with diligence and ardour. But at the
nfortunately interrupted by a spitting of
ecame afflicted. This confined him to his
y a rigid course of temperance, abstaining
fermented liquors, he succeeded in conquer-
n prudence induced him to continue ever
dhere to the same strict regimen. It was
sobriety, temperance, and moderation, are
Nature has vouchsafed to mankind;" and
roof of its efficacy, as by attention to this
eded the allotted period of man's ordinary
that he lived to the age of ninety-three

resorted to London for the purpose of at-
ies. The Botanic Garden at Chelsea had
en established by the company of Apothe-
indefatigable student, attending also lec-

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continued their travels in It
collecting plants ; and then,
elled through Languedoc, he
Bordeaux. After a short r
England in the latter end o
his profession, having taken

Soon after his return t
celebrated Dr. Sydenham,
and was by him introduce
November, 1684, he was pr
for the Royal Society, of w
of January following. Fro
on and frequent contribut
1687, he was chosen a Fell

Flattering as were his
not hesitate to accept an ap
him the means of enlargi
Medicine.

The Duke of Albemar
maica, applied to his phy
proper person to accompa
pacity, who consulted Slo
latter too tempting an opp

---

* The Cucumber Tree, Umb
nolia accuminata," " M. Umbrel

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of plants in that part of America, as
e, Manchinello, Avellanae purgatrices,
f which, though I am pretty well in-
us an observer as yourself, I should be
uit the Mandioca bears; for whatever
t without, I am confident. You may
there will be any species of plants com-
and whether Ambergrise be the juice
o the sea."*

prepared for his voyage; and at length
687, he went on board His Majesty's
Captain Lawrence Wright, then lying
ichor the same afternoon, and reached
er, where his medical skill was in great
remained there.

y reached Barbadoes, where they were
Edwin Steed, the governor. They
they again put to sea, and passed St.
Guadaloupe, Montserrat, and once more
hed St. Christopher, and finally, on the
Port Royal Harbour.

voyage availed himself of every oppor-
l productions of the different islands at
, more particularly, he made great col-

, that it is now ascertained, that this substance
or intestines of the Physeter Macrocephalus, or

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admiration of the learned,
reputation was now so gr
was elected Secretary of
his active character and
immediately revived the
tions," which had been int
in this office till 1712, wh

Dr. Sloane's profession
1694, he was chosen phys
stances appear to have be
his refusal to receive the
would not offer a precede
punctually took the mon
those belonging to the h
pointment he filled till 17
resign. As it is as a nat
with this work, we shal
ments and honours; and
of Physicians he warml
sick poor, which met wit

Although the Doctor
household, we are told th
and that in her last illne

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l folio, entitled, "A Voyage to the
es, St. Christophers, and Jamaica,
rbs and Trees, Four-footed Beasts,
, of the last of these Islands; to
herein is an Account of the Inhab-
&c., of that place, with some Re-
Continent and Islands of America,
, which have not been heretofore
ellow of the College of Physicians,
'

one hundred and fifty-four pages,
est Indies, their discovery, climate,
de and diseases, and more particu-
an account of his voyage in forty-
the book, occupying two hundred
th an account of the plants.
ed eleven plates of shells, crabs,
the work one hundred and thirty-
double folio, and are executed by
style of that period, and are a
e of the author.
ns had leisure to put the recorded
; part of the plates for it were en-
red ; "having," says he, "a multi-
physic, which I esteem one of my
the lives of persons be regarded

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ch we have more to do. From a
e commenced forming it. His col-
ıge were the nucleus. The earliest
/, who, under the date of April 16,
)r. Sloane's curiosities, being a uni-
›ductions of Jamaica, consisting of
, earth, shells, animals, insects, &c.,
ral folios of dried plants; and one
of ferns, and another of grapes; the
›wer, fruit, &c. This collection, with
l discourses and observations, is in-
:y, sufficient to furnish a history of
ıim. It received its first and per-
1702, upon the death of his friend
ueathed his extensive and valuable
on of his paying certain legacies
s the precise state or value of this
›wing, as there exists no separate
.ographical Dictionary, indeed, in-
ues which, swelled with short his-
nts, amount in all to thirty-eight
in quarto. But these catalogues
:'s death, to be those of the whole
ve know that, from many other
ıtations ; and the account he him-
of Petiver's collections, compared

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in the second column ar
Museum after his death.

From the comparative
and 1753 it will easily be
materially increased every
January, 1741, he commer
from his house in Blooms
completed the transfer l
the remainder of his life
the society of the learne
visit from the Prince and
King George III. Dr.
conducted the Prince ar
was seated, being aged a
down by the good old ge
great esteem and value l
learned world was oblige
variety of curious books
and instructive productic
a square of about one hu
three front rooms—had
over with cases filled wi
beds or state as they ar
tained stones formed ir
creature that bears ther
warts in the shellfish ;

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ourse with all sorts of jewels, polished
nion, or with gems carved or engraved,
ains of antiquity. For the third course
ld and silver ore, with the most precious
ed in the habits of men from Siberia to
Japan to Peru, and with both ancient
n gold and silver, the lasting monuments
Prusias, king of Bithynia, who betrayed
ho, mad with ambition, overran and in-
esar, who enslaved his country to satisfy
delight of mankind ; of a Pope Gregory
er medal, his blind zeal for religion, in
acre of the Protestants in France, as did
ning king in that country. Here might
ngland crowned at Paris ; a medal rep-
riving which should pay their obeisance
the effects of popular rage, when over-
as in the case of De Witt in Holland,
he arrival of William, the glorious ex-
the happy sway of the present royal

and ten feet in length, presented a most
beautiful corals, crystals, and figured
rflies and other insects, shells painted
previous stones, and feathers of birds
emains of the world before the Deluge,
catastrophe, and are so many evident
es' history.

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nine feet wide, and with weapon
it appears that the Mangalese, a
the French, had the honour of i
bayonet. Fifty volumes in foli
detail of this immense museum,
sand articles.

Their Royal Highnesses we
satisfaction at seeing a collecti
ideas they had formed of it, fro
On this occasion the Prince
memory ; for in such a multipli
tions of Nature and Art, upon
had seen before, he was ready
upon viewing the ancient and
cious remarks, that he appeare
chronology. He expressed th
magnificent a collection in Eng
nation, and expressed his fixed
to the benefit of learning, and
Britain, to have such a grand
the latest posterity.

Amidst these tranquil occu
the period assigned by the Psa
of their strength," exceed, the
ted portion of existence, and

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›quested it as a favour to him (though I
ıour done to myself), that I would visit
.vert him for an hour or two with the
d with anything particular that should
.nces of the Royal Society, and other
whom I was weekly conversant with,
offee with him on a Saturday during the
at Chelsea. He was so infirm as to be
except sometimes, though rarely, taking
a wheeled chair. Confinement made
' of his old acquaintances to amuse
of his life he was frequently petitioned
branches of families of eminent men,
were famous for their learned works,
s received, and considered with atten-
ere not found fraudulent, they were
ritable donations. He often desired
he merits of such petitions; and, if
ioned me to convey his bounty to the
saw him, I was greatly surprised and
man in the agonies of death. This
ıry, 1753, at four o'clock in the after-
ıth, at four in the morning, being aged
ıim later than any one of his relations,
ast agonies being beyond what I could
ıd weakness of body he seemed to retain
esignation to the will of God."

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preached by Dr. Zachary Pearce, at t
who had been expressly forbidden by
gross flatteries so prevalent on such
accounting it a degree of profanatio
human excellence that pulpit which
men the attributes of the Deity, and t

Two daughters only survived Sir H
having died in their infancy. Sarah, t
Stanley, Esq., of Poulton in Hampsh
Cadogan. Unwilling to deprive the
of his fortune, and yet reluctant to
death, and equally reluctant to dep
of so valuable a collection, Sir Hans,
magnificent result of the exertions o
condition that Parliament should re
of £20,000, a sum, though large, said
value of the gold and silver medals
and he himself states in his will that
least £50,000. In consequence of t
above forty of the trustees, appointed
museum, met the Lord Cadogan and
house, Chelsea. His Lordship prod
trustees with the codicils containing

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Earl of Macclesfield having been de-
chair, the will and codicils were read.
nd value of the museum, and an ab-
ed, was read by Mr. James Empson,
m for many years past, and was then
stees. Sir George Lyttleton then
that a memorial should be presented
atter; and a committee was appoint-

ent immediately closed with the offer;
entitled, "An Act for the purchase
Sir Hans Sloane, Bart., and of the
for procuring one general repository
convenient use of the said collection,
ldition thereto."
,000 was ordered to be raised by a
of state, together with private indi-
amilies of the principal contributors,
the name of "Trustees for the Brit-

s was to provide a proper building
is confided to their care; and after
fixed upon the Mansion, built about
ke of Montague, who, being at that
ver French artists for erecting and
ontemplation This palace, together

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trace the progress of this increase be
very recently been newly arranged an
respect, and a very copious and inter
may be obtained from the twenty-eigl
Contents of the British Museum, pub

We have seen him born with a
which nothing, it is probable, but
could have sustained ; yet cheerfull
while cultivating the abilities his Mal
have seen him carry with him the g
of his instructors, while pursuing hi
and, finally, brought into active life
men of high talent and reputation,
result fully justified. His middle age
alleviating "the evils that flesh is
the sovereign on the throne, to the
an hospital, receiving honours from
other ; a generous promoter of ever
the mental powers of man or relie
length resigning his soul into the h
humility and resignation, and with
practiced, leaving direction that no
nounced over his remains, but that
by those salutary reflections which
excite. Never were the vanity of
of all earthly possessions, however
and all that we are accustomed to

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preciate the advantages of an institution,
r those pursuits that elevate man above
gain—an institution intended to assist
e philosopher in their several studies—
ost liberal scale, is open to all who, from
y wish to inspect, or for particular pur-
h an institution is valued in an age
educate all classes, it is to Sir Hans
him is owing not merely the respect of
gaged in the promotion of the delightful
the gratitude of the nation at large.

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more intimate and appreciable
and important to us, becomes
relations and dependencies in t
Natural Science, therefore, can
of interest. Still there are d
individual parts, as there are
capacities. If we are accuston
splendid plumage and gracefu
mammalia as the real labouring
Kingdom ; if we despise the Re
the deadly venom which they c
pleasure the class of Fishes, th
food, a valuable article of comm
many nations.

But no branch of Natural
thorough study than the clas
abounding in use or injury to m
companions that swarm around
about us, and on the earth ber

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or them in meadows, fields, and
in rich frame-work upon the walls
raise them with the greatest care
lose a single hair of their magni-

great diversity of occupation, and
Insects. Here we see the indus-
there the lazy lounging beggar;
e the gates of their subterranean
playing their fiddles, and there
nderful dwelling; while above in
, clad in gold, silver, purple, and
nd on the earth below are lurking
arasites.

t number of learned men in our
nselves in the different branches
ks have been published on the
ofessor Godman for his excellent
ich has been augmented by the
o Wilson, Lucien Bonaparte, and

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efore, I shall continue to ramble many
nore tropical nights, guided by the dim
en, through open fields, dark woods, and
y the satisfactory assurance that these
useful to all students of Nature, and
thus a way may be opened to a more
l History, and a deeper admiration of
beautiful creatures that, in one common
gratitude and proclaim their dependence

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immense. But, in spite of the
their own class, they have sti
countless host of insects that
bushes and vegetables of our ga
by eating their leaves, and s
despised on that account, mu
their beautiful colours and mo
we would destroy them all a
that our trees, with all their k
more pleasing to us than the
build their nests on the branch
their happy songs. We shoul
and forests half their charm i
Robins, Thrushes, Mocking-bir
gres, Finches, Black-birds, (
hundred others. And yet,

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to the hollow tooth. I tried
instances, and the tooth-ache
ved, but whether the remedy,
tient, acted therapeutically, or
g of itself, I confess I do not
usands of these insects may be
th the greatest ease, and may
rs in a bottle of alcohol, and
test the therapeutic value of
y it.

s are sometimes beneficial in
nas often been the case with
ve speak. Thus the ancient
sacred a certain dung Beetle
use by feeding on putrid sub-
them, it purified the air and
man. For the same reason
account of its destroying

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g, pointed, and crossing jaws
ther insects with ease.

oft and white, but are provided
and have the same rapacious
ents. They dig perpendicular
and when driven by hunger
o have their round heads cover
retreat, and here they wait until
ver the hole, when they seize
drag him into their cavern.

of which there exists many
States varying in colour and
multitude of noxious insects,
be respected and protected.

of Tiger-beetles represented in
and 2, Cicindela repanda, and
and near Cranston, R. I., upon
the vicinity of the Stonington
also found in all the Middle,

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name because they ma
evening upon the brai
caterpillars and devour

The real Carabi,
are also distinguished
by their magnificent c
found under stones, or
soil, on which latter a
Sandläufer (Sand-runn
produce a greater var
in the Alps and all
the splendid, blue-colo
violaceus) still brings
recollections of the
fectionate kindness o
lovely Peninsula of th

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ne stones, and putting them into a
appeared. But judge of my as-
turn in the evening, in finding a
front of my house. Had I been
the kind feeling of those people,
r hospitality towards strangers, I
witnessed that crowd with some
proached the house, a number of
y towards me, the right hand on
f salutation, and with the left pre-
with these splendid carabs, as a
n for me.

r two days after when I left Bai-
nd when almost ten miles distant
e, I heard behind me the swift
and, turning round, met one of
of Baidary, who had followed me
resenting me another jar full of

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and while gazing with admiration
ften occurred to me that the Apollo
enus de Medicis, and the Madonna
ve been accurate copies of the men
Crimea.

e not less to be admired than their
ness, quarrelling, riots and murders
n there. You may travel unarmed
es from one end of the country to
being molested; such a thing as a
of there, and everywhere, in the
palace, you will be hospitably re-
ed as an old friend. If the rest
more like the poor people of the
e something." That country was
end of the last century by the
e favourite of Catherine II., and
an, sent a prisoner to St. Peters-

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statements which I knew to b
I can only account for from t
sided view of things a travelle
rapidly passes through a cou
impressions from only partial
roneous impressions which Mr
regard to the world-renown
particularly demand correctio
during my residence in St. I
quainted with his most intima
iarly knew his whole life an
afterwards, at Sympheropol, in
I was hospitably received an
dame Caroline Ivanowna Palla
distinguished Philosopher, and
of course acquired the most

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On his return t
sell his large collec
the sum of fifteen 1
Empress heard of it
he knew very well
but that he did n
lation, for his cabi
roubles, and that sh
at that price, und
cabinet should rem
long as he lived. A
letter to Pallas wit

This delicate an
press, was followed
estates in the Crim
but a great portio

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hen he preferred it; and after
npress, when he was over sixty
e anxious to see his fatherland
ingly, he settled on his wife,
emain there, a very fine estate
nd he went to Berlin, his na-
e died at the age of seventy

married. He had by his first
ter, who was married to Count
in the Russian army, who was
the battle-field of Austerlitz.
still alive, and resident in the
n I was there. Although over
she was the life of society, a
tual attainment, and an accom-
e spoke fluently the Russian,
an, and Tartar languages.

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ntestines.

the air, as, for instance, Butter-
the whirling Water-beetle; or
entipede; or on plants, as the
e body of animals, as Ticks and

lant or an animal which is not
nsect. Hence the number of
e, and without exaggeration, it
are in existence more than a
ent species. If we adopt the
verage, three species of Insects
plants, (and on some plants we
as many,) we can easily see
mber cannot prove too small an
er that there are now known
housand species of plants.

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wounds, which are ofttimes
fatal to man, as, for instance,
scolopendra; and even of be

The faculty called *Insti*
animals, and by which, from
without instruction, they per
ing to their own support, or
also found in Insects, as wel
mind, which would astonish
the Tumble-beetle in vain tri
a hill, it runs for assistance,
two or three other ones who
with it, but as soon as they
ants fly away, and the firs
alone. Bees, Wasps, and A
great courage, and woe to
nest! Some flower-beetles,

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ınot enlarge more upon these
mentioned in the descriptions

ɔroved, ingenious arrangement
ivided into the following eight

hafers. All Insects with horny bodies,
four wings, of which the upper ones
nd the lower ones parchment-like, as
tle, May-beetle, &c.
sects with four parchment-like wings,
who obtain their nourishment by
a moveable proboscis, as, the Cicadas,
ɔd-bugs, &c.
ts with four parchment like wings, of
ɔer ones overlap on the back, and the
es are thin and folded together like a
for from those of the preceding order
ave strong jaws instead of a moveable
e. g., the Grasshopper, Cricket, and

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Having now laid
Entomology, and th
in the following pa
Natural History of C
already commenced.

But, before spea
cannot omit a passin
nious friend through
enabled to spread t
their lifelike attire.
this and the succee
pear hereafter, have
from nature by my
of this city, who, al
the monotony of pr

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rk the name of Hoppin—a name
n the annals of American Art.

y remarked, in the lives of the
ration, that they afford a constant
ing of Nature's great law of Anta-
undoing what the other does; the
pecies would inflict upon man are
ecies, which prevent their super-
an even balance in the scale of
insect world as with the political,
orlds. One political party is con-
conservative restraint upon the
rsies of the different religious sects
healthy balance between morbid
strained licentiousness, between a
over the consciences of men, and
ganism. The fanatic abolitionist
curse of Heaven upon a slave.
unrestrained, might involve his

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to this order. There are a
render us the greatest serv
stances, carrion, decompos
rooms, dung, and decayed
Dung-beetles, Carrion-beet

Now the food of Beet
to us the idea of dividi
Families, according to t
subsist upon, and this divi
most uniform, and the mo
really natural division. A
Coleoptera under one of t

1st. The Carnivorous Beetles,
Beasts, prey upon living
first Plate.

2d Scavenger Beetles, whic

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, *Pentamera;* those with four on
ive on the fore feet, *Heteromera;*
amera; with three, *Trimera;* and
, *Dimera.*

ough as convenient as the artificial
ts by Linnæus, according to the
is still subject to the same incon-
e system of Latreille and in that
arranged in one and the same class
not and cannot coincide with each
external form nor in their nature.
system, the Crocus and Wheat
ss, Triandria, simply because each
ree stamens; but what an immense
etween them, in their properties,
ernal forms! Many others occur
ich are equally incongruous. So

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second family.

Scavenger

The body of most all of
very hard, and their feet
digging. They deposit their
wood, or carrion, or in th
instances, the grubs (larvæ
eggs live several years in the
are metamorphosed into perf
with the Stag-beetle.

In this family we find th
instance, the Hercules of Sou
inches long. Many of them
their very singular forms. U
we generally notice several

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ry very bright in their colour.
re very powerful and of great
rse or cow drops its dung in a
flying to it from all directions,
it, working it up, and making
ound, into which they deposit
ls of it like the Tumble-bug.
nsects live under ground, and
eir dwellings, viz., on manure,
n, or roots. They are of a
at thicker behind, and round,
nerally pale yellow coloured
horny, they have two strong
ach side of the body are the
ng of nine holes, the same as
ack is generally curved, and
themselves out, or walk upon
them live in this seemingly
ral years before they change

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looking, fat larva, from
larva lives in the stem
Cabbage Palm (Areca (
into a black Weevil, tw
rum, which will be ill
which, however, belong
which we shall speak h

The gigantic beetl
are from three to fiv
tropics of America, A
size and magnificent co
of their appearance i
climes, form great c
cabinet. They are as
the Elephants, Rhino

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and paid servants for attending
vatching them night and day, in
ctly acquainted with their manner
noires des Insectes," published in
ith the most curious and interest-

éjeau, Aide-de-camp to Napoleon
xious to increase the number of
mological cabinet, that he even
military campaigns for this pur-
lly occupied in collecting Insects,
th pins on the outside of his hat,
vered with them. The Emperor,
army, were accustomed to see
thus singularly ornamented even
the departed spirits of those
ce had their revenge on him;
Wagram, in 1809, and while he

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Fig: 9.

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Prince, being one day at
when I showed him the
only a short time before,
the Haïtien Admiral B
the foot of a Cocoanut P

Some months ago, it
of our leading papers t
verted to the Catholic
Now, as on account of hi
turous travels he has gai
as I am intimately acqu
is no more than right
statements, even at the
cursive.

The Duke Paul of W
Emperor Nicholas of

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of pecuniary and family diffi-
ıappy, the Prince twice left
ıth America, travelling several
. name of Baron Hohenberg,
in making valuable botanical
ons. During all this time he
appanage, consisting of about

tur-historical excursions in the
ıe often spoke of his prospect
Greece, for which office he was
. he felt entirely certain; but
rned that the Emperors of
rejected him, considering him
, on account of his radical
r low-spirited and even melan-
was his passion for Entomo-
, collection of one hundred

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our roads, and in our
about three-quarters of
vaulted body without
little triangular horny
of the two ring-covers, v
for instance, in the Ce
Its antennæ are short,
posed of leaf-like piece
folded like a fan, at the
thorax and head are ext
bronze colour. The hea
border on the margin,
perpendicular horn. T
of a changeable green
and strong, calculated f

This Beetle, like al

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was full of larvæ, was found
l of smell, while the other
as putrid as before. This
d to the satisfaction of every
t.

le is found in great numbers
summer and in the autumn,
Western States than in the
he very obvious reason that
ed in the warmer climates,
apt to become infected by

.

nade of this Insect, and one
icularly for the young ladies
ad these pages. By taking
ers, thorax, and head, and
h other on the outside of
ve a beautifully variegated
reen and red, which will

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ment than to be admiring th
clime and studying the chara
spangled ornaments of Nature

Now, in order to accompli
yourselves during the summe
and preserving them. You
them running in the roads, or
or sitting on the leaves of
air. If you keep your win
warm nights also, those insect
at night will fly into the r
and may thus be taken by
the Beetles are venomous. B
them and make them die as
must be provided with a w
horse-radish vial answers this

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pirits of camphor. Beetles
vial of whiskey or alcohol,
for many years, and trans-
les without injury. I have
these details, because I am
. and preserve these insects.
Dung-beetle, very beneficial
ell known to every child, is
or *Pellet-beetle* (Ateuchus
in all the States of the
lar ones are found in all
y, speaking of that species
says: "Aliud scarabæorum
pilos aversis pedibus volu-
ontra rigorem hiemis ver-
ur."
North America is half an

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which they roll it, and
the precious object of

The ancient Egypti
benefit derived from t
ered Pellet-beetles as s
them in their temples
are also found even in
chus sacer of the Egyp
same character and hal
as large, and is also b
Egypt, I saw it also in
along the Caucasus.

We come now to
in rather bad repute
feed on decayed woo
deposit their eggs in
many trees. I do not

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far West, but which are
old, well-cultivated States.
subject has been somewhat
iculturists, and I trust these
rs of some who will be con-
practice of laying out whole
e enclosures, is a wasteful,
y of wood. I believe it to
ry had not been wonderfully
le coal-mines, our woodlands
deprived of their trees, and
d by the pound. Now our
he expense of timber and
hese wooden fences, but they
expense of repairing them
were entirely avoided they
e benefit from their estates.
no fences in the country, the

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wood, is

us. (Passalus cornutus.)

e II. Fig. 7.

1¼ inches long. It is black,
Its antennæ are rather more
the Lamellicorn. Its head is
ith a curved horn, two lines in
rt, pincher-like jaws, a bright,
ıtermediate line, wing-covers
and six short legs, covered
s in the trunks of decayed
parts of our country, from
ınd the West India Islands.
, and very much resembling

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from the stem of oak
the point of a knife t
will follow a piece of
around these trees tow
and August.

These Beetles are
attract their attention
ticularly by their pr
pinch very hard.
home as playthings fo
however, the little fe
their tears. In som
wagons, which they
and to which, for th
Beetles, making ther

Digitized by Google

/hich in company with its
ɔd, is

(Passalus cornutus.)

. Fig. 7.

¼ inches long. It is black,
ts antennæ are rather more
he Lamellicorn. Its head is
ch a curved horn, two lines in
t, pincher-like jaws, a bright,
termediate line, wing-covers
and six short legs, covered
s in the trunks of decayed
parts of our country, from
and the West India Islands.
t, and very much resembling

Digitized by Google

trees, as well as the sweet br
from the stem of oak trees,
the point of a knife they wi
will follow a piece of meat.
around these trees towards ni
and August.

These Beetles are well l
attract their attention by th
ticularly by their prominen
pinch very hard. Wood-
home as playthings for their
however, the little fellows s
their tears. In some coun
wagons, which they load wi
and to which, for their amu
Beetles, making them as be

Digitized by Google

nd had become decayed, and
the surface of the ground,
ese grubs, which I put in a
ecayed wood, but they died

Europe is of the same form
an as large again, and is there-
of Europe.
, which the ancient Romans
lelicacy, were taken by them
re probably the same species.
es roborum delicatiores sunt

g-beetle, when full grown, pre-
s cocoon, which is of an oval
emains about four weeks, after
as a perfect insect. These
the States of the Union.

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perature.

Several years ago
day of May with a
an enthusiastic amat
History generally, li
Old Country. All a
the ground and pick
and, holding it up in
as if addressing the

"Der erste
Ist mir de
Dich sah
Am erste
Dass dir
Hat mein
So ist de
Für mich

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side of roads, or in placed
heaped up, and in decayed
different kinds of roots,
with the nature of other
d conclude that the larvæ
inue in that condition up-
fore they become perfect

Amphicoma vulpina, (Tab.
of North America. It is
s the Indian Cetonia, but
all over with long reddish

ng to the family of Scav-
ed *Fungus Eater*, Boleto-
eds not only on decayed
it also on decayed wood.
cies of this Insect I have

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wards and inwards, rese
Its thorax has two larger
directed forward, looking
wing-covers are surmount
their whole appearance is
metschet or mosque, cov
minarets or spires.

The body of this anir
hairy, and it lives princi
wood.

Another, and a ve
belonging to this family,
feed on dead or dried a
well as the lower classes
and intestines of dead l
ternal parts of preserve

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ɔotic sovereign, ornamented
ɜr-key on their side; others
nd altogether quite respect-
appearance, because they,
h resemble, live also on the

ɔf these Beetles, as I have
beneficial to man, by con-
ɔmposing substances. But
of them against which the
', notwithstanding it is not
line. This small Insect is
nthrenus Musæorum), and
covered with gray scales
the wing-covers. If these
ɔt appears black, and loses

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The late General A
the United States, pres
large boxes of splendid
Butterflies, but, much
them I found the larg
destroyed by this lit
succeeded, however, i
them from entire dest
alcohol, and by maki
out of cork, and the
the wings to them wi

In order, therefore,
from being destroye
necessary to have th
it be of cork or wa
of turpentine, and

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binet-beetle is two lines in
de of the body little bundles
ich, when disturbed, it erects
ıe Porcupine does its quills.
mes seen upon our walls
cts.

lphæ) have a broad body,
upon which is a declining
d with antennæ terminating
mber of species are found
erica, among which are, for

ırginalis,
equalis,
rinamensis,
nericana, etc.

ıaracter of one species are
ers, the representation and
for all the rest.

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in the body of some
in the greatest harm
obtained with ease,
the fetid exhalations

Another Insect b
enger Beetles, and
for decayed animal

The *Big Grave*
of which there are
has a large black
in an orange-colour
and orange-coloured
undulating black b
wings. The habits
and astonishing.

The dead body
or toad, lying in a
diately scented by
in great numbers in

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with their head and thorax,
lig the earth away with their
rrion gradually sinks into the
time, one or the other of the
beneath, as if to examine the
the dead body; then, creeping
rk recommences in concert.
s of hard labour, the body—
rog—is so far buried that it
surface of the ground. They
urs in this manner for several
is sunk about a foot in the
probably in order to prevent
ing her eggs upon it.
gger deposits in the carrion
h are white, cylindrical, and
t each extremity. These are
eks, and the larvæ proceeding
full growth after four weeks
hey quit the dead body, go

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the Coleoptera.

Herbivorous Beetles, o

The Herbivorous Beetles -
a horny skin, and very hard
grubs and as perfect Beetles, -
substances. Some on green w
Capricorn Beetles; some on
different kinds of Weevils or S
on leaves, as the Cucumber B

As these Insects infringe the
of Man, who, like every kingl
every living being in his dom
for his sake—as they destroy
our fences, fuel, and furniture
cherries, pears, apples, plums,
and wheat, and all our frui
leaves of our garden, orchar

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benefit or injury, that has
them, and them against Man;
for their abodes, learned their
of propagation, and duration
discovered their use or their
nkind the use which can be
ones, and the only sure means
ıl ravages of the noxious ones.
ıt the Naturalist collects them,
cts that live, preserves them
them with unwearied care
ıcquaints his fellow men with
ous researches.

was, in ancient times, and I
en now in modern times, too
by the ignorant and money-
ass of the people, as a trifling
ork for his bread; and should

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to their remarkable
organization, to the
from all others, to tl
monies, and to the g

The fact that the
to the civilization o
more than a century
self-made man, Pe
conceived the idea
of science would c
lization and refinem
accordingly he est
a large museum of
and in order to in
go there, he ordere
to every visitor.

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could not understand how
Vice President of that Insti-
enthusiast for such useless
gs and other vermin." Yet
principles, prudent manage-
sacrifices, of that excellent
the College of New Jersey
existence.

Herbivorous Beetles. The
eak, are the *Spring-beetles*,
lled Skippers, or Snapping-
shed from all others, by
of which they are enabled,
to spring up into the air
posture, which they could
legs are very short. This
e of the thorax, between
rds the extremity of the

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operation perseveringly
the great amusement of
and lay them on their

These Insects genera
crevices of the bark o
larvæ live several year
Beetles. A few of the
live in the ground an
somewhat injurious to

There are many sp
continent, which may
colour, and antennæ.
in the United States i

The Velvet-spotted Sp

This Insect is abo
and slender: some s

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l, like all the others, I have
a more correct English name,
he resemblance of its spots to
et-spotted Spring-beetle.
n all the States of the Union,
han at the North. It is found
f trees, where its larvæ also
ve flat bodies, of an orange
veral years in this condition
fect Beetles.
ing-beetle (Elater noctilucus),
another species of the same
nore appropriate Latin name,
inating, but its common name
jo. This Insect is nearly an
nd half an inch wide. It has
orn-like spots upon each side
are the principal organs for
ich appear, when alive, like

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being able to see to rea
them. I nourished the
them with sugar, their f
in about ten days, and wi
their light.

I feel peculiarly gra
because during my excu
were frequently the mea
has dark night surrounde
forest, or on the mounta
were my only guide, an
have discovered a path
me safely on my journey
to a wise Providence fo
night-illuminators, when
shrouded with impenetr

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but soon did night display
; veil'd : innumerous tribes
swarmed, and darkness made
; awhile they streamed
:e upon flowers that closed
's from the eye of day ;
lark, eluded search,
non, starring the sky,
fire."

les are found in all the West
and Texas, and how far north
exactly ascertain, but several
g the same luminous qualities,
f America.

l from a phosphorescent sub-
of the constituent ingredients
ich they can exhibit or not,
ubstance this species of Beetle
ne manner as the Chameleon
ith the fluids of their body,

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enabling it to find its
perhaps, by inspiring
weapon against its n
exactly determined. It
light has often frighten
wholly unacquainted w
who have actually tal
spectres or the spirits o
many like absurdities
common mind, were t
more popular, and mo
will the young of this
at Nature "as through
directed study might
eyes, and enable them
a thousand points hith
and shadows of ignoran

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so called on account of their
, which resemble those of a
ich, in some species, are longer
/ may also be recognised by
ı, and by the four joints on

rical; their head short, broad,
provided with strong jaws, as
haped antennæ; their thorax
but, in some species, flat, and
both sides; it emits a sound
iction, that is, by moving it
n, like a person rocking in a
account. the Germans call

ularly those of the Southern
ics, are very handsome, and
deal of attention by their
colours. But their grubs are

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antennæ, and also in respect t
pictus, for instance, (Plate 1
American species, and is onl
the *Prionus Hayesii*, a Cap
Africa, is nearly five inches
Its antennæ measure seven
four inches long. This gig
brown colour, and has many

The Painted Capricor

Plate III.

This beautiful Insect is o
and one of the countless 1
rolling year is full, only a
own peculiar charms. Spr
of buds, and of flowers;

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ıd, here, the blue Vernonias
. the yellow Helianthus and
· figures upon the green velvet
: the purple and white Eupa-
the rosy Spireas and crimson
bordered by the variegated
den-rod, form one magic sheet

:r Golden-rod, feasting upon
ınd upon its aromatic leaves,
ne little *Painted Capricorn-*
ttle more than half an inch
al form. Its whole body is
elvet. Its head and thorax
lines, and its wing-covers are
gles, and spots of the same
half as long as its body, and
wn colour.
: is seen in the month of
he flower-dust of the Golden-

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Fig 16

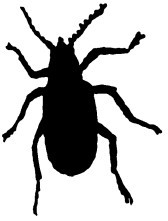

Fig. 13.

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Dr. Harris, of Caml
injurious Insects of Mass
particularly, and the lat
Entomology, Table 53,
which he calls Clytus s
latus, and C. Caprea.

We have now com
the ravages of noxiou
Legislatures have ena
of Birds, the great d
probably on this accou
Insects injurious to ve
disappeared. In my t
have not, for the last
Rose-bugs (Macrodacty
to every flower, nor

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or their beauty, than most of our
ertainly reward us by saving our
. by furnishing us a wholesome
of food. I had the pleasure
last summer at Bristol, R. I.,
ny esteemed friend, Mr. Dimon,
of Rhode Island, whose acquaint-
lve years ago in Port-au-Prince,
States Consul for the Republic
delighted to see the robins and
nilies playing round me on the
igeons, perfectly free and unmo-
nests and flying among the
stic trees which shade his resi-
protection of animals throws an
ound the family mansion, and
the residence of two or three
he centre of happiness to all

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its name. Its antennæ are a littl
the length of its body. This Ins
upon the common Elder, and its g
of the same shrub.

The largest Capricorn of the
North America is the *Stag-beetle* C
cervicoruis), which is three inches
of a brown colour, and has jaws
one inch long.

But the handsomest of all is
Capricorn (Lamia longimana) of
It measures two and a half inch
one inch in breadth. Its fore-leg
long. Its head, thorax and wing
olive-green, striped with red, yello
very singular manner, and resembli

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es holes, with her pointed mouth,
body in which she deposits her
ggots issuing from them enter the
ınd perennial plants, devouring all
stance, and destroying whole plan-
. The ravages occasioned by these
on our fruit-trees, apples, pears,
hazelnuts, and in the rice, peas,
grains.

Veevil. (Calandra Palmarum.)

Plate III. Fig. 15.

largest Snout-beetles of North
s found mostly in the tropics. I
Domingo, and have given an illus-
representation, of it in the third
k, because it gives an excellent
and appearance of all the other
of Curculiones.

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parts of St. Domingo
about three inches l
ference, of a dirty
head, looking like a
transparent skin. Tl
are roasted upon a
eaten with dried a
with salt and pepp
epicures as the *ne pl*

It is a pity that
not adopted the poli
never sit down to a
to each other and sa
tite!" This friendly
peculiarly apropos b

The Cabbage Pal
pearance as the Co

Digitized by Google

have her deposit her eggs in it
erwards obtain a large crop of

of Snout-beetle is the
alandra granaria), which is not
a, oblong and chestnut-coloured.
mmense injuries in granaries, by
their snout into the grains of
r rye, and depositing therein an
roceeds a white maggot, which
aceous substance, so that nothing
ll. These maggots live in this
ty days, when they metamorphose
from which after about ten days
proceed, the females of which
their eggs, each laying about
ty.
il is originally a native of Europe,

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called Seed-beetles. Th
have just described, l
comparatively much
body.

The most destructi
weevil (Bruchus Pisi),
more common in Ame
in peas. The Beetle
bed-bug; round, flat on
brown colour, with whi
wing-covers.

When the peas are
pods, the females depo
we find therefore a
every green pea, the
be perceived by a s

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to remember that we practise
e case of the Pea-weevil.

Europe they put their seed-
before planting, for the purpose
es, and several of our scientific
ists, according to Dr. Harris,
peas in air-tight vessels over
ting them, or at least not to
end of May.

peas is an extensive branch
Old Country, because dry peas,
e usual favourite dish of the
classes throughout the year.
many, Moravia, and Hungary,
rdens, and cultivate them in

melinæ) are another species
ho feed mostly on leaves or
ite small, from three to five

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ıousand changing tints that dye
ıo created being can ever bring
ion that illimitable space, where
unceasingly twinkle and glow,
ıg all, the Milky Way presents
' billions of shining worlds,—so
ever attain perfection in the
ountless animated beings which
vast green temple of Nature.
n of the human intellect can
small part of the wondrous
acter of the animated masses
st gifted genius and the high-
ed with the longest experience,
› a knowledge of his ignorance
l the burning thirst for more
›e satiated in adoring what it
True, "immortal longings are
l limits surround us on every

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internal and external
equally essential par
Nature.

Bugs are easily di
by having, instead of
proboscis, or snout, in
which they insert into
from which they deri
ing out its juices. T
the head, and when in
but when not in us
attached to the und
head is usually smal
(antennæ); their bre
the hind-body is sh
of this Order, the

Digitized by Google

the only exception to this
›ly live in a larva state
ıe ground.
tly on the juices of plants;
out the circulating fluid
blood of warm-blooded
which they become very
to man. Some of this
culiarly unpleasant odour
hat is often perceived in
raspberries, blackberries,
which is occasioned by
t the eggs which these
›n it, and which are not
sight. I once heard a
ıer little boy, who com-
'ies he was eating tasted
telling him, "Never mind,

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as a colouring sul
perhaps, to inclu
which I always
ally learnt its ut
with an industric
half-grown child
—all healthy, i
stances. He tol
from three o'cloc
at night; and w
their being able
sleep at night,
otherwise, for th
want of sleep th
sensible to the st
four hours wou
oblige them to
utility of Bed-bu

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ervations when abroad, and
ars' residence in this country
every year, but myriads in
rwards.

ific name "Septendecim" to
cada, because with the spec-
n from America, he was told
y seventeen years; an opin-
ely prevails throughout our
rom analogy alone contro-
we consider that all other
the same size, or larger, or
e metamorphosis and man-
wo years in attaining their
uld the Red-eyed Cicada
o this natural law of their

answerable tone in this mat-

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again nine years after (1843
in the Middle, Southern an
every appearance the news
year of the resurrection of th
being now seventeen years s
The editors of the New Yor
and Alexandria newspaper
incorrect chronologists, or t
much shorter than elsewhere

Now it is a fact, that du
residence in this country,
passed without my seeing s
cadas in one or other of th
maintain that the name
neither correct nor proper.

That there is a great dif
different years is very true,
with regard to other Insect

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: so many opponents, who be-
l Cicada appears only every
rding to my own experience,
or all this, it appears every
he was compelled to undergo
recantation for having taught
arth, rose from his knees in
' Notwithstanding this, it re-

and very popular notion with
hat it is the same species, or
ith that noxious Insect men-
s one of the plagues of Egypt.
rect.
of injurious Insects occur in
led in the Hebrew, Arbe,
gab, Chanamel, Chasil, Char-
latsal.

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sume." Now we cannot
that the Cicada, which
the dew of leaves as its
with which it can mast
such immense ravages.
brew text, as Martin]
or "Heuschrecke" in Ge
French, which is "Gras
ing a very voracious inse
jaws, and an animal ver
the East of Europe, we
sible for such a creatu
tilence.

It is time that sucl
corrected in our Englis
tures! It is time that

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and pestilence. To avoid this
e the word "Locust," wherever
into the word "Grasshopper"—
shall presently speak at length,
history will be found many
y it must be the Insect desig-
no other.

nly called Locust, is a harmless,
as been celebrated for its song
times. "To the ancient Greeks
greeable than the chirping of
use it seemed to give life to the
grove and academic walks, but
eyed to their minds the idea of
ing." So delighted were they
ey kept it in cages, and called
of the Nymphs"—"the Sweet
er"—"the Love of the Muses,"

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and continually an object
upon the olive and othe
the ash, from the bark
their stings, there exude
becoming dry, is known u
and which some have su
that manna of which tl
wilderness. This supposi
incorrect, because the su
is very cathartic, and is
present day. But Eh
species on Mount Sinai,
tree by the stings of a l
rus), which tastes like hc
be identical with that me

The *Red-eyed Cicada*
IV. Fig. 17), with red-b

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the abdomen, by the rapid
/ produce their peculiarly loud
females are all dumb. Virgil

——————raucis
'esonant arbusta Cicadis."

ı beats down upon the plain,
the hoarse Cicada's strain."

hem, and in one of his odes
e gods. William Spence, in
tomology," thus translates the
ancient Greek philosopher,

:adas' lives,
have voiceless wives."

who was probably an old
w that females of the human

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bark with their horn
Their eggs are white, 1
teenth of an inch in leng
able to them, the eggs ar
when the young ones l
of larvæ, each one being
six strong feet, resemb
treat into the ground, w
ing to the observations
after which time they c
upon a fence or the
transparent shell (Plat
their perfect form as f
mount in the air, and
from branch to branch
music as they go, and
five weeks fulfil their
their species.

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ıort months of their existence .

Even in their subterranean
ion of larvæ, although feeding
al plants, their injury to vege-
.d scarcely enough to indicate
wells in the ground.

ı utility is unquestioned—thou-
tribe find in them a delicious
, of Marietta, Ohio, says in
ıned, that when the Cicadas
hey are plump and full of
that they have been used
soap! It has also been re-
boil them and consider them
De gustibus non est dispu-
his own taste.)

argest Insect in this order,
ɜs measuring between six and

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and fifty species of C
Museum at Berlin, sev
from Africa, twenty-fiv
ten from the south of
New Holland; showing
parts of the world t
number of species are 1

The Indians of So
that the Lyerman (C
the *Lantern-fly* (Fulg
the night, emits a light

I have several tir
to which those are s
Natural History. Th
sidered themselves we
believed and circulate
there are whole races c

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is the case with regard to
s a native of South America,
odily construction belongs to
describing. This Insect is
ratively large bladder, which
d, and from which, it is said,
bright as that of a candle.
ginated more than a century
the work of the celebrated
ved several years in Surinam,
day the Indians brought her
ing Lantern-flies, which she
y made so much noise during
from her bed and opened
she immediately dropped on
d was she at the multitude
m it.

sts, such as Prince Max of
f Wurtemberg, Count Hoff-
and several others who have

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name of Lantern-fly, b
since been considered
superstition, or, at bes
any of the species exis

With regard to t
Natural Science, I ca
work of the late Tho
"We are told, that t
wood was transforme
present age of knowl
or tail of a horse, in
by many to become
dead leaves shed by t
gradually into anima
changed their place
historian who relate

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espised as absurd, yet many
in Europe and America, who
imation of a horse-hair. But
have often a shadow of truth
ate, if not excuse them by the
istake. The historian of the
been deceived by the Mantis
he Soothsayer), the wings of
lance to a leaf. The Gordius
orse-hair, and no doubt gave
metamorphosis above men-
of the walking-sticks may
nated from the singular ap-
he Insect which bears this

ed the name of Madame Me-
ng the story of the Lantern-
somewhat celebrated in the

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place, Graf's affairs
his conduct in other
was obliged for a t
consequence of this s
assumed her husbanc
tions, but became knc
appellation.

After her separa
a long time abando
devoted herself excl
in order to be able
accuracy for the pu
result of her labou
in 1679, in three v
the plates being eng

The difficulty of
larvæ, is sufficient

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y, than her wish to delineate
of which were already well
preserved specimens.
il for America in the year
e of her daughters. The
was Dutch Guiana, often
ver of that name, on which
situated, and lying between
rees of north latitude. In
dent curiosity found ample
l she remained nearly two
in collecting and painting
Europe, and gave those
public in 1705, in a work
insectorum Surinamenisum,
y Gaspar Commelin, from
or."
ious female naturalist, who
to the improvement and

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live upon animated beings
water, also in forests, garde
according to their food,
bivorous.

I trust I shall be pard
notice of my readers, a v
seems to have been create
ing inattention to personal

Certain parasites, whos
the human body, and wh
placed by Linnæus and hi
less (apterous) insects, b
like the Hemipterous In
suctorial organ, also with
do not undergo a perfect
to place them, like the

Digitized by Google

of their children covered with
:ly populated with this vermin.
; better instructed, and began
ı clean, these insects ceased
r this purpose it is probable
;um, and hair-oil were chiefly
used, because every kind of
nsects, by stopping up their
ɔrgans, and they immediately
ıd die. An experiment that
ɜure on caterpillars.
ıtures make their abode prin-
of human beings, as may be
ıe haunts of the filthy poor
oppressed Jews and peasants
rodden and degraded country-
ınnumerable host of beggars
ıes swarm,

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Another species, also a nu
family, is the *Body-louse* (Pedi
whose favourite dwelling is i
shirt-collar, and which very
generally incurable disease ca
humbling to human pride, an
mortal man, to think that the
ignorant and the wise, princes,
have been and are alike subj
Examples are not wanting: the
Herods of Judea, the Roman
the mighty Philip II., king of S
have been carried off by thi
malady, in which the whole
covered with sores, and is liter
these insects. See "Maladies d
1806."

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ıem, but as they people rapidly
is conjectured that they feed
near a dwelling-house, are on

he blood of man, is very well
ertain that blood is their only
ıem in abundance in the pine
Wiborg, in Europe, as well as
orth America, and in newly-
s. It is probable, therefore,
of pine wood.
ieved that this vermin is a
and was accidentally brought
pine timber. But this can
Aristotle, who lived three
rist, mentions this insect in
," and so does Pliny, some
Natural History. They are

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Fig. 20.

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sions.

general protection of animals
stan, we find a very curious
ital Memoirs," who says: "The
it is a most remarkable insti-
the hospital contained horses,
ts, monkeys, poultry, pigeons,
The most extraordinary ward
to rats and mice, *bugs*, and
The overseers of the hospital
from the streets, for a stipu-
night amongst the *fleas*, *lice*
s condition of suffering them
ut molestation.

as, O sancta stultitia!

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that for boys in the country
and amusing occupation, when
keeping themselves and the
f.

, as well as all kindred ones,
ds, which are sometimes more
of a scorpion, which is often
countries, and produce tumors
pigeon, for several days. But
ar, that there is found in the
n by the name of the Wheel-
), which, like the Electric Eel
unicates to the person whose
ctric shock, which comes out

s. (Membracis.)

IV. Fig. 21.

mostly of a green colour, and
our wings, and a very large

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ıgerly sought by Ants. If,
unning up and down the
ıbs, we may consider it a
esence of Plant-lice.

ee, or bush, or herb, that
fields, that is not infested
ice. And in spite of their
gust we naturally have for
associations are connected
of living, and of repro-
much interest. They both
g forth their young alive,
not take place in any of
multiplication is immense,
he animal, really astonish-
fact that one single Plant-
g ninety young ones, from
From the month of April
generations are born, and

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s in its construction or mode
duction, or in its uses—aye,
ies it is capable of doing!
he meanest and most trivial
e created for the express
the vastest amount of evil!
else to distinguish them, or
notice! And when God-like
he animal creation, the last
and the Creator, when such
renown by the vast amount
when, undistinguished from
alo of destruction that sur-
throne of human glory by
s mourn"—(and not a few
with such unenviable im-
t not be so with the meanest
its curious construction, why

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an Insect whose only dis-
to be its noxiousness, to one
utility—to one abounding in
one to which they are in-
utiful of the colours which
"beautify the human form

g to look abroad over the
ow every mineral, vegetable,
constituted so as to minister,
s of man—to see the vege-
ged in extracting mineral
storing them up for man—
tinct, selecting these as his
old not only his food and
to him through the ever-
kingdoms, but even his
esented through the same

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as the appropriate fo
whose life or death m
Cactus not only char
the arid desert blosso
food for an Insect tha
dies to clothe man wit

This Insect is the
louse, also called Sca
and of the order Hem

This little Insect
used for dyeing the
and purple colours,
article of commerce,
made, long before it
was composed of.

The French Natu
the ridicule of his r

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e the court of Antiguera, in
Mexico, there to be examined
gin and nature of these crea-
n proved Ruusscher's opinion
eal henceforth was considered
robably the first instance in
restored to its natural rights
idicial Court.* And notwith-
emed out of place, I cannot
at this decision of a court
hose who prevent the "fair
same favour at the Court of
and justice must eventually
e distinguished Mrs. Paulina
and persuasive philanthropist
yet see some of the results

n de Cochenille. Amsterdam, 1729.

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than fifty thousand Cactus
no other purpose than to
e valuable little Insects. The
ıtion of this article of com-
falls to the lot of the Indian

circumstance, that the dried
s, and may be kept in store-
ed for hundreds of years. A
icates the use which Nature
e of it.

the Cochineal, and one which
at is known or can be said
by Thiery de Menonville:
du Nopal, et de l'education
, 1787:" to which I refer the

is often found in our hot-

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rulers, and the latter prefer
swords, guns, and bayonets, t
profitable pursuits of Agricul

Another species of Shiel
native of North America, d
on account of its great util
a most important material f
merce: this is

The "Coccus Lacca," a
Scale Insect is found upon
trees (Ficus, religiosa), and
shrubs, where it secretes fror
substance, adhering to the
and well known in commer
lac. This substance is a
in the manufacture of var
arm-bracelets, necklaces, w

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various kinds throughout the
Insect produces it so fast and
ere the consumption of shell-
than it is, it could readily be

ner species of Shield-lice found
ich have from time immemorial
used for dyeing red, and which
purpose. Hence their name
d Romans was "Coccus," by
ermes," and by the Persians

g, of Berlin, to whom the
ebted for his laborious micro-
the Animalcules, found large
x. mannifera, Ehrenb.) upon
; shoots of which were covered
d-louse, which he called Coccus

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means to destroy them.

Dr. Harris, of Cambridge, n
"Report on the Insects of Mas
vegetation," says, "the best app
tion of the Lice, is a wash m
soap, and eight of water, wit
lime enough to bring it to tl
white-wash. This is to be p
limbs of the trees with a brusl
cable, so as to cover the whol
cracks in the bark. The prop
the trees, is in the early part
sects are young and tender."

This may appear to my en
like advocating wholesale mu

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Murder and Liberty," in which
lity and moral right of assassinat-
despots wherever they are to
d. He premises his argument
has been, and is considered legal
ıed heads to arraign and execute
litical reformer, whenever and
ound: ergo, he argues, the same
ngs to the patriot and political
owned and uncrowned despots,
er they may be caught.
ine finds adherents, I am sure I
amend the massacre of all inju-
n the same principles of logic;
ıbs, ergo, we should kill them.
e mentioned, constitute but a
rous order Hemiptera, which to-
ing, are generally known under

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ing, interesting, and inst
be, if their writers could
scriptions and special hi
information concerning s
tiles, fish, insects, or plar
ally met in their journey
Taylor, in his beautiful
York Tribune, is perhap
sionally enters the dom
and thereby adorns his
with all the fiery imagi
He has set an example
ing in this manner, use
one of the most disting
New York Tribune; d
matter it contains for a

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act, that our Schools, Colleges,
es, which are the leaders and
tion, almost entirely neglect
nce. Hardly any of our Insti-
cept Cambridge, have regular
ch, and except Princeton, in
f any, have Cabinets of Natu-
ve a sufficient number of books
ct, to form a library. True, in
umerous Colleges, we always
he Faculty—
istry and Natural History," or
Philosophy and " ," or
ematics and " ."
ivorous Professors undertakes
ments affixed to his name, de-
lifferent as the trades of a tan-

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bone of a mastadon, and such
fail of exciting a smile, even
ed with a tear of pity.

Some few years ago, the
Western Colleges, showed
contained many such wor
mentioned, and besides th
pair of black satin breeches
and with the legs extended
in front of every tailor's sh
pended on the wall, an old
of wood, and having a ver
pressed some surprise that
tuted a part of their Coll
replied, "These breeches

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;ard to the expense of establish-
'al History. A splendid Cabinet
ery little expense to any institu-
e a competent Professor in this
ism in any thing, but particular-
ce, is very contagious, and the
ne lectures of a popular Profes-
', will very soon become them-
his interesting department, and
in vacation, or in the leisure
l constantly be collecting zoolo-
eralogical specimens of all kinds,
e for the Cabinet of their Alma
ire to know what each insect,
what its use and scientific name,
ollect every thing with which
it to their Professor. In this

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world, with which to embellish
native city.

No place in this Union has so
ecuting such a plan, as the giga
and I hope soon to see her Inst
ample, in this respect, which w
tion. The wise Legislature of t
several years ago, expended n
dollars for the purpose of maki
quainted with the natural pro
A costly zoological, botanical, a
vey was made, and illustrated b
precious work containing seve
merous expensive engravings,
specimens collected, was erecte
spection and instruction of the

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Botany, and Mineralogy, as ap-

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Have been divided, by Linna
viz.: Grillidæ, and Locustidæ.

The Grillidæ, or those proper
dwell, as their name indicates,
meadows and fields. They hav
ers, and their females are des
but both sexes, when flying,
sound by rubbing their saw-lik
parchment-like wings.

The Locustidæ, or Walking-
filiform antenns. The female
long sword-like ovipositor, and
ed with a spot resembling an
of each wing-cover, which they
produce their peculiar sound.

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rder to harmonize with the En-
e Bible.

ssification, an illustration of the
Carolina Grasshopper, Gryllus
22, and of the Locustidæ in the
n Concavum, Harris, Plate V.,

mbrace a numerous variety of
ecies, all of which may be seen
on at the beginning of autumn.
lso, the females deposit their
hundred each, some in holes in
en them with a glutinous sub-
kinds of leaves. From these
lowing spring, the young Grass-
resemble the perfect insect, ex-
of wings, and these are not de-
he end of summer, when they

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in so doing they discharge
mouth, which act probably
they were ruminant anima
beasts, who have more tha

In some parts of France
gary, these insects are use
it is said, successfully, the
parts affected, and allowi
It is not improbable that t
effect to the causticity of
like the lapis infernalis.

Grasshoppers are very
ing from the presence of
ly the Hair-worm, Gor
causes their death.

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in fact, that one cannot walk
, without being annoyed with
oniously fly in your face, or
ulders and head.
bout one and a half inches
d wings about three inches
are of a dusky brown color,
ı a yellow band on the mar-

ound in the United States a
ther species, which are gene-
each other by the color of

omest species of Grasshoppers
erica, one of which I will in-
is commonly found in private
s. This is the "Grillus Dux,"
wings when expanded meas-
ıg-covers beautifully colored

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country from all sides, a
ford sufficient rain for n
making it fruitful in the
the support of man, as we
for numerous Reptiles, su
salamanders, frogs and to
feed more or less on ins
Grasshoppers, of which t
numerable quantity. H
are the instruments made
to rid us of a greater ev
estimate of the damage t
tation were it not for the
country with the immens
Europe, and several part
are destitute of water a
dreds of miles neither b

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. are tempted to wish their
se in their hideous forms we
evolent use; we forget the in-
s fixed the circle of dependence
ted things; we forget that all
nay live; we think not of the
eron, Bittern &c., who feed most-
ereby render a superabundance
e; we consider not that these
hemselves up as food for man,
n in his turn must die and also
s! Aye! and still more we for-
ge of nature clearly shows us,
begin to live, we also begin to
le we live in all the pride of
nstant, daily food of the most

er, although neither large nor
se, has a curious and a wonder-

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of the great God! we have p
whole world and all that is in

Many ancient and modern a
counts of the almost incredible
human race by these creatures
has ever yet related that it ha
sary to send an army of 30,000
in order to prevent their ravag
pened under my own observa
soon relate.

The earliest records we ha-
pearance of Grasshoppers on t
Bible, where they are mention
of Egypt. That country was
them that the surface of the gr

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rd "locusts" as it occurs in
Bible, but I have before
is incorrect, and that the
ture was not similar to our
really identical with the
re here speaking.
inhabitants of Cirenaica,
subject to the ravages of
d on that account were en-
rasshoppers, in their three
imes during the year: first
could be found, then their
ct insect. He states also
cted in Lemnos, by which
d to bring a certain mea-
magistrates annually.
nite army of Grasshoppers

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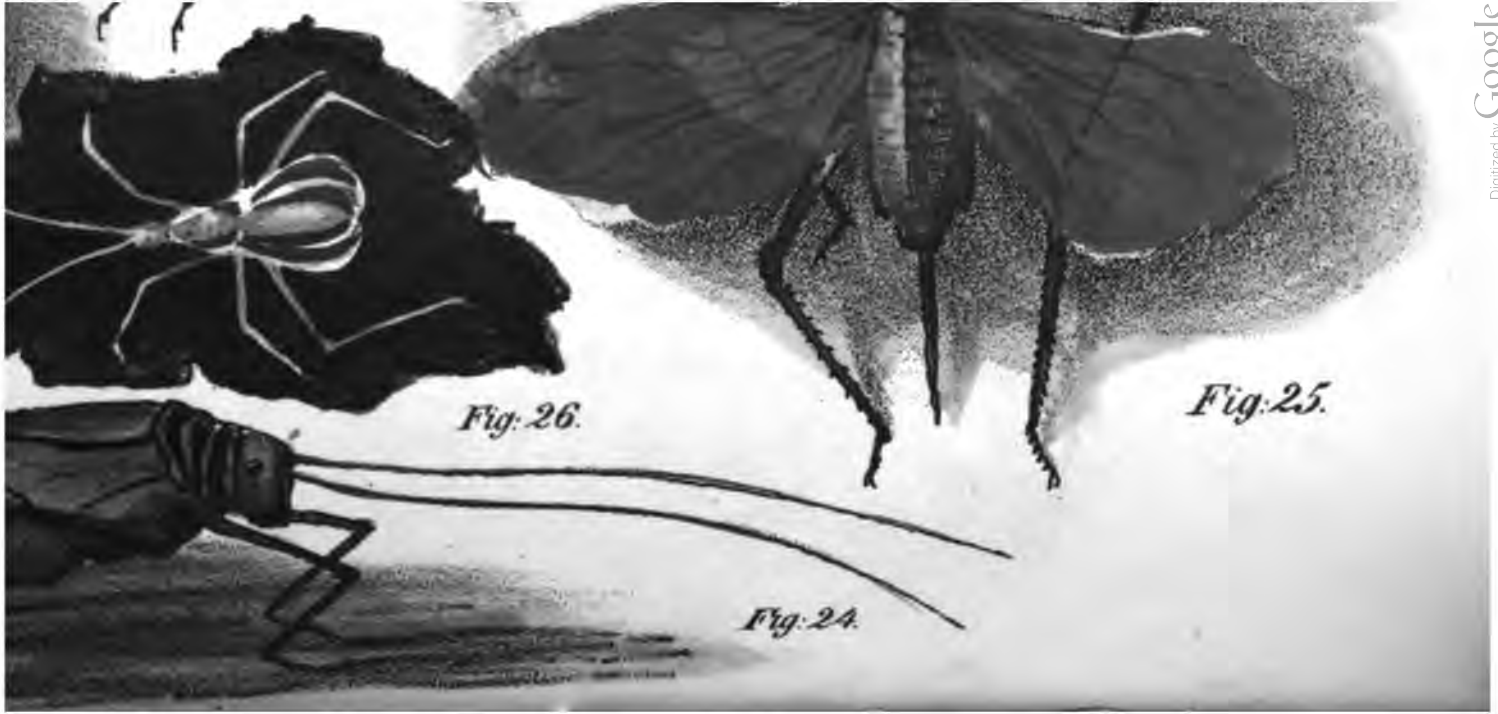

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ɜt high, and when the wind was
ı was so powerful as to be smelt
ındred and fifty miles."
n empire was again alarmed by
innumerable quantity of Grass-
l the pleasure (if pleasure it may
eye-witness.†
Moscow in the beginning of the
), in order to visit the Crimea,
countries lying between the
as. Passing through the well
ɜd in Russia, Governments,) of
Charkow, Kiew and Woronesch,
of these States expressed in a

ology by Kirby aud Spence, London, 1818."

lung des natürlicher Reichthums, der Grösse
Länder jenseits des Caucasus von B. Jaeger,
lshaften. Leipzig, by C. H. Hartmann. 1830.
s, Extent and Population of the Russian Pro-
B. Jaeger, Member of several Learned Socie-

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per hour, night and day, (which w
great speed,) when I was sudden
speed in the desert prairie lands ab
Kiew. Here the ground, as far as t
was covered with wingless Grassh
inches long, and laying piled up o
the height of two feet. Of course
ged heavily as if drawn through a
prevented the horses from trottin
fast, and the revolving wheels we
ered from two to three inches high
hoppers. This state of things conti
goverment of Ekatharinoslaw an
Black Sea, a distance of about 400
of such an immense number of the
and rapacious insects, justly occasio
foreboding of famine and pestilence, i

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ı as far as possible in sacks and burnt
ıding this, I found on my arrival
ıe middle of June, that numbers
red their wings and had already
ıart of the vegetation.
ıjestic view of one of their flying
tself to me in Asia, in the Island
er having crossed the Black Sea,
the modern city of Kertsch, on
This Island is the residence of
Black Sea, who on that account
Russian language Tschernomorski,

Soon after my arrival in that
ɜ continuing my travels, I saw
ınce of about five miles, near the
ı, several thick and solid columns,
arly from the ground, like the
, which at the height of five hun-
the form of heavy, dark clouds,

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dering Grasshopper, Gryllus mig
same insect as the one mentione
3d chapter, 4th verse, where h
ing "his meat was Locusts and
even now a common article of
eastern nations, and particularly

In the United States we hav
different species of Grasshopper
are very similar, and whose ra
extensive, breeding famine and
allowed to increase and multi
countries. This, however, as
impossible as long as we have
birds to devour them.

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ctures as to its origin and
rd significance in its most
r nothing in nature that is
every sound, each warbling
pty air, and every act of
e deep, often mysterious
ful mind all convey some
er in the garb and soul of
the stronger and more ir-
The busy Bee, that im-
nnot fail of favorably im-
ment and the sure success
servering industry. The
s excite our disgust and
ly teach us how to regard
The ever constant and
ompany, is ever silently
s the great lesson of fidel-

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tellectual significance, a
enthusiasm, the natural
ture, the philosopher's
hidden mysteries, and t
conviction that nought

Such reflections migh
sand various ramificatio
the contemplation of th
do not satisfactorily acq
But a facetious poet has
what occasioned its ev
and pretends to have o
hints as to sundry inter
Katy and her lover. A
terview beneath the m

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a pale green, and its wing-
color, which however fades
n when the insect is dead and
olor may be prevented, as I
n regard to the Gryllus Caro-
intestines immediately after
dominal cavity with cotton,
making a longitudinal inci-
part of the hind-body with a

nterwoven with veins resem-
in the males, have a hard
base of each, which is shaped
eye, and which being rubbed
ke motion of their wing-cov-
peculiar to this insect. The
e of these musical organs,

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ning begins, the female will c
eggs and depositing them in the
will announce in loud tones tha
preserve these eggs in the turf
and open them in the following
the insect in a perfect condition,
of wings. It is a very singul
general deficiency in entomolo
numberless though they be, stil
say that they have seen this
It dwells in trees and shrubs an
during the day under the lea
that many, if not all have accid
few, except those acquainted
observed it knowing it to be

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ɔlor, and all belonging to the
nce, the Sword-bearer, Con-
conical head and a very long
eaf-winged Katy-did, Phyll-
arrow-leaved Katy-did, Phan-
several others.
ı many other species, which
resemblance to leaves, and
ɛ accordingly named, Laurel-
etc.
has been the origin of many
rvellous stories, namely, that
metamorphosed into insects,
ged into dead leaves, &c. &c.
, work on America published
the most absurd stories in
[e said that on this Continent

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there is found in Australia a
amorphosed into a plant.

On closely examining th
that the caterpillers of a ce
country, dwell and feed up
tree, and that when descen
purpose of constructing thei
grows out of the body of al
vegetating plant, after whi
dry and hard, and assumes
Now, I suppose this singular
ly true, and in order to its e
to know that fungi, mushr
productions of this tribe, h
seeds, which are dispersed i

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ften subject to a disease by
ly covered with a white ef-
ure of this distemper was
nd in fact, was never ascer-
, when Signor Bassi proved
called Botrytis Bassiana, in
ch had by degrees occupied
ody, and then burst through

itic growths may occur on
y animal or vegetable body,
rance of these facts that has
llous and absurd stories by
s in Science may thus be-
to the uneducated. I sup-
elive that in the tropics, a
lly change into a gamboge

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boge, they adhere to its bark
the course of a few years th
racter. The trunk and branc
gradually decay and drop o
the gamboge tree, trunk, bra

Crickets.

The Cricket has already
English poetry of Cowper,
become extinct, as long as
still must be familiar to a
June to October, during t
illusions, has excited much
nature for many ages; an
of love and of home whi
cently so touchingly port

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he sung—

full of mirth,
kitchen hearth,
thine abode,
r of good,
warm retreat,
re soft and sweet."

ies of Crickets, some of which
f the world, but all resem-
distinguishing characteristics.
es and colors, according to
ut all have parchment-like
the sound peculiar to them
argins of their wing-covers
they are perhaps the most
some of them thus fiddling
aybreak until sundown, and
the rising of the sun.
ets which dwell only upon

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raised lines.

Like the Katy-did it is ofte
the leaves of trees and shrub
nised as the little creature wh
is so familliar. Only the ma
sound, which it does by eleva
very high and rubbing them
The process may be distinct
under a glass tumbler, and w
They are however quite diffi
ceal themselves behind the le
night, and only occasionally
abode.

In the beginning of Autu
cisions into the tender bran
and therein deposits her egg
until the commencement o

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make by digging holes into
orizontal direction, and then
ls. They always walk into
t is to say, with their hind-
g are usually standing be-
abodes, ready to retreat in

l fruit, and with great in-
s into their holes, that they
ir leisure. They are very
tremely delicate about it
ter that adheres to leaves,
slaking their thirst with
lowers. In their journeys
oid water, and if a small
o be in their way they
s or small pieces of wood
ney can pass over it with-

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Fig: 27.

Fig: 28.

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This quarrelsome disposition
be made serviceable in getting r
ets, for it is only necessary to b
mer into the house, or rooms, v
the latter, and war will take pla
diately.

The youth of Germany, howev
of them, and there is scarcely a
ral small boxes made expressly
ets in. They catch them by th
stem of grass into their holes
and so much delighted are they
they carry their boxes of Cricke
at night, and are soothed to sle
lullaby.

The House or Domestic Cricket,

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another house into theirs and
cholly song, it is a signal of the
r of the family. But such super-
ion now-a-days; on the contrary,
y generally considered an omen
country-people everywhere, the
agreeable and highly prized.
, that the deepest emotions are
When the patriot La Fayette
any years ago, he was received
plause and parade, wherever he
every city and village through
ted themselves to the utmost to
e country resounded with the
, with the trumpet of jubilee, and
ionade. But the greatest com-
l that which affected his noble

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speechless silence. Lovers an
little children, sit silently toge
at each other, in rapt admirati
and blending together, convers
each other in tones that huma
because only human words ca
but the spirit sits above the t
peculiar language, which it a
press. Something of this effe
by the chirping of the domesti
the world call brainless, those
of romance, or poetry, as well
tellectual fire burns brightest,
be calmed into silent, pensive,
the mere sound of this little

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hopper that are.
summer's song,
he winter long,
l shrill, and clear,
out the year.

or dawn of day,
thy play;
extend thy span
date of man.
whose years are spent
ontent,
though he be,
npared with thee."

cheta Gryllotalpa, brevipennis, is
he three species, being about two
guished from the others by hav-
e fore feet, very short wings and
ody is of a grayish color, and its

construction of its fore feet it
d, that it acts in the same man-
he mole, and so it does—it feeds

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snakes.

Cockroaches. Bl

The *Common Cockroach,* Blatta
so universally known in the Old
for ages, that it is almost impossibl
it first originated. Suffice it to
body, about an inch long, of a d
color, and long awl-shaped anter
composed of eighty joints.

Cockroaches, as is well known
and devour every thing that com
as they are at the same time very
always be destroyed when encou
done by pouring boiling water u
ing them with sulphur smoke.

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ıp their forelegs as if in the at-
:e, the country people of France,
;aged in prayer, call this insect
ıns, "Prega Dio," the Germans,
ınd the Latin names of "Mantis
ta, superstitiosa, oratoria, men-
'hich have been applied to it,
ıme superstition.
ebrated missionary, St. Francis
when he saw a Mantis holding
votion, he asked the insect to
, whereupon it chanted a very

l the Apostle of the Indies, was
y, and was born in 1506, at the
avarre. A friend of Ignatius
the order of Jesuits and went
Africa as a missionary; from

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Sparrman, a distinguis
forms us, "that this insect,
by the Hottentots, as a tu
happens to alight on any p
sidered as the peculiar fa
looked up to as a saint."

In what a different light
upon the Mantis? This
which is itself afraid of a
garded as in the attitude o
scribes, as

"Borrowing the livery of H
if its position may be allov
tion at all. It holds up its
the purpose of catching a
pillers, plant-lice and other
come within the reach of i

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nporary of Linnaeus, Buffon,
ı. In the early part of his life
painting in Nurenberg, but
self entirely to the represen-
he drew from nature with un-
e then wrote his valuable and
ranch of Natural History, and
s. He died in 1759.

ke disposition and cruelty of
nly necessary to put several
er, when they will immediate-
uriously striking at each other
s. The males are consider-
males, and in these encoun-
ims to the voracity of their
off their heads and then de-
iecemeal.

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te Thomas S
believed this
uthern State
y Mr. Chas.
him that he
insects are n
ood th
ies
ri

Digitized by Google

rmed. They are straight lon-
n of a pipe, slender, and some
ıre more than a foot long.—
roportions of the whole class,
length, may be considered
ts.

ıble the Soothsayers, but their
ke, nor adapted for catching
carnivorous but herbivorous,
gs, and although they feed on
rious to vegetation, because
eless weeds, and the juices
Their antennæ and legs are
xtended, and as their bodies
h and brown color, it is often
, or to distinguish them from
y stand, as the insect is often

Digitized by Google

dantly at his summer
Island.

The late Thomas Sa
did, and believed this a
in the Southern States
respect by Mr. Chas. I
informed him that he h

These insects are m
to Westwood there are
three species; in Sout
North America, three
in Australia, twenty-se
species.

Mr. Say, in his Am
good illustration of th
37, and of the Spectru
I refer the reader.

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/-tour very well executed
ıthor of a great number of
in the Transactions of sev-
ɜ of the Union.
ɜr of the Society of Friends,
Philosophical Society, Pro-
ı the University of Penn-
the Philadelphia Museum.

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tion of a rich collection of
the sight of these, all see
" varietas delectat," variet
diversification of colors, v
ferent forms upon the bo
rous insects, and even up
some in lines, others in ci
ics, or letters, and all in e
cannot fail to excite our
on us the conviction, that
creations bear the same st
variety, which pervades t
tering orbs that roll in en
are alike in form, or subst
of all the myriads of livi
earth has swarmed since
breathed upon chaos, no
precisely alike; but on t

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ıs. And yet we find all these
:hree natural kingdoms unit-
r; all dependent upon one
arts of one great universal
with the great philosopher,
Nature is the unity in vari-

comparison with the other
entitled to the rank of no-
find no impudent beggars
the Flies; no parasites as
ısects; no working class as
ıs insects, bees, wasps, ants,
ıns as among the families
, Katy-dids and Cicadas;
cratic idlers, who, clothed
ırple, and ornamented with
e nought to do but to seek

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insects by having four exp-
ceptions, covered with colc
They are oviparous anima
of their instinct, lay thei
which are best adapted foı
geny. From these eggs p
vae,) many of which are
sume more than twice th
four hours. We may cong
are so small, and that w
are more moderate in ou
weighing one hundred and
ry day three hundred pou
ing four hundred pounds de
pounds of grass, our terrest

Digitized by Google

or moth, issues, no more to in-
ıse it has exchanged its mouth
ɔngue, with which it can only
ıts and flowers.

sis, some very great changes oc-
and beauty of the insect, as well
ɛture. Some of the handsomest
their cocoons the plainest,even
ıtterflies, and vice versa. Thus
ɛmarkable for its beautifully va-
ıen it becomes adult as a hawk-
dingy gray color. But the con-
ɛ, and an insignificant looking
ıetamorphosed into a very hand-

ver, are not confined to insects,
hroughout the animal kingdom,

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But the metarmorpho
has always been a subje
tion, and of profound ar
ever been considered th
ence here, and his bright
In the most ancient tim
and strength to the beli
souls, metampsycose, as
stories and fairy tales, in
nual casting of the skin
that reptile appears ever
bright and glittering col
the remotest antiquity
and endless life hereafte
Caterpillars, notwithst

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ich they feed; thus the po-
ıa, feeds only upon the dif-
shade tribe, (Solaneae), for
t, the potatoe and tomato
apilio Asterias) lives upon
ı tribe (Umbelliferae); as
caraway, anise, celery, &c.;
'lexippus) feeds only upon
k-weed.

ɔillars furnishes an excel-
dies the finest of varnish.
ɔody of each caterpillar is
substance by which they
ɜ their cocoons, and to ob-
in many countries in large
ater until a greasy liquor
surface. This oleaginous

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apiece, and of which he
sand specimens a year.

Caterpillars are of qu
as the principal food
good they do in yieldi
ment for others, would
reflect upon the subject
compensating the injur
are at least 1200 speci
existence, and as each
three hundred eggs, h
females will produce
seccond generation, 18
27,000,000,000.

If such an immense
an animal were to be c

Digitized by Google

[ay, June, and July, by no
on, the number of caterpill-
oyed will amount to 6,000,-

fore of great use to us in fur-
d and nourishment for the
embellish the country with
heir beautiful plumage, and
us with a palatable and de-

estroyed by various kinds of
ch are not so useful to man,
pecies of the Ichneumon fly,
r thrusts one or several eggs
terpillar, upon the flesh of
hese flies subsist, until they
s, of course destroying the

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Lastly, caterpillars are r
man, but they are directl
to him; they not only i
palatable food, but they
costliest and most beautif
for human pride! The
that deck earth's greate
woven by the despised
their feet! What a prof
of nature, and how stri
dependence of all creat
insignificant caterpillar b
portant articles in the m
the world. An infant b
tiful colors, into a textur
splendid and appropriate

Digitized by Google

ıe cocoons of which might also
e, strong and excellent silk, and
: will probably be made as soon
: North America arrives at ma-
[shall speak at length in some

ɔaratus have been invented for
caterpillars, and the simplest
ɔttom of which is covered with
h gauze, so as to admit of fresh
ne places large cages, like those
ch are also covered with gauze,
ɔed the different plants upon
eed. This is a very convenient
ng their mode of living, the
nd their metamorphoses, as also

ɛiner Darstellung des natürlicher Reichtums
Caucasus. Leipzig, 1830.

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autumn, they commence
the new leaves and shoo

After the caterpillars
times and are full grow
selves into an immovab
pupa) which eats no mo
of which may almost al
and other members of
Many of these come out
summer, again lay their
er caterpillars, which lat
as cocoons, exposed to
cold without the least ir

A few butterflies, ho

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er greater satisfaction to our
important to speak more at

inds of feet, viz.: three pairs
neck, and a number of fleshy
ng parts of their body. The
ects have eight pairs of feet,
s six, and others only five, or
Those that have eight pairs of
l uniformly on the ground,
n that number walk differ-
ess with their body extend-
creeping forwards form an
of the body which is desti-
ing their hind feet to those
dvancing with the forepart
nanner as we move the hand
ith the thumb and forefin-

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proportion to the size of the
exterior surface is either smo
rias on the parsnip, Plate VI.
Danaus on the milk-weed, o
the Saturnia, Plate VI. Fig. 2
other grasses.

The food of caterpillars, w
taken from the vegetable kin
clusively on one species of pl
the white mulberry: others or
genus, as the potatoe worm on
others eat any kind of veget
(Arctia.) The periods of taki
ferent; some eat only in the
others during the whole day,

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ented by man, they sometimes
re they live, and feed together
instance, the tent Caterpillar
, Harris,) on apple, pear, or
h confraternities the trees of
uined, unless the destructive
in April or the beginning of

s of Caterpillars.

caterpillar is horny, of a glo-
t contains a mouth with an up-
en which are sharp horny jaws,
nsversly the leaves, beginning
t with their jaws as easily and
re do with scissors.
istinguish in them any organ

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some kind, by issuing a thread fr
the under lip.

Body.—The body of a caterpill
ringlets, upon nine of which, on e
tral portion of the body, is seen
rounded sometimes with a red or
oval spots are the respiratory org
sect breathes. That these are th
gans is proved by putting oil or a
over these air-holes, the conseque
immediate death by suffocation.
erpillar is put under water or al
be seen issuing from innumerabl
parts of its body, and when the s
the insect and held up against th

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takes, and upon this also, pro-
ness of the silk they make, in
ıe quality and color of butter
. of the cow.

together and opening at the
ıe spinning apparatus of cater-
stinctly seen by opening with
, the back of the animal. The
tubes is nothing more nor less
e varnish, of which the people
e use, but which no one has yet
this country. Should this var-
general use, our most noxious
me beneficial to us.

hs and Butterflies, although not
mplex as those of caterpillars,
s of interest and curiosity, and
y and splendor.

Digitized by Google

the magnifying glass, looks l
of a number of elevated poin
each one may, perhaps, be
This horny skin is transparer
looked through, for instance
presented to us a whole arm
spite of this multifarious vi
sees only that object which
vision, or which is in a strai
sight.

On the upper part of the
are seen two thread-like fila
tennæ, as in the Saturnia Io,
and in the Asterias, Plate VI
organs has not yet been e
Naturalists think that these

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es, and consists of two lateral
united and which form a hol-
is of an elephant. Its length
different species of butterfly.
in the Hawk-Moths, but a
t all, as the silkworms, for
ts only a few days, and can
uble of procuring food.
yself with experiments upon
terflies which were hatched
as the month of March. I
r, holding the insect in my
have seen them seize the
ore feet and thus holding it
l with its saliva moistening
he juice which could easily
e trunk. This is an experi-
n make at pleasure.

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leaves of trees and bush
upon a bush with your
I write also for the you
these insects will somet
ly caught in a net. As
in, their airy promenad
away by the cruel whi
or burnt alive by the fl
tinue flying about all n

It is very singular,
conceal themselves fron
fly towards a light in th
as almost all can testify
around a light in a war
windows are open, unti
that they could not fly.
ing these insects, and st

Digitized by Google

ts, visible only to their males,

tera, called Butterflies, are seen
day time, and are distinguish-
nes by having a knob at the
n, as for example, the Asterias
rias,) Plate VI., fig. 31. Of
in.

nal Lepidoptera.

tion of Naturalists has often
nology, the names of gods and
s heroes and heroines, with
most splendid of the lepidop-
have among them, an Apollo,
os, Ullyses, Ajax, Nestor, &c.
the first Nocturnal Moth of

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er grass-like plants, upon which

One of these caterpillars is re
fig. 27, and when full grown is
long. Its fine colors attract
who soon finds himself affecte
pains of its prickles, which stir

It is easy to raise these ca
can so easily be procured, cor
lar leaves, or any kind of gr
their skin four times, and whe
or eight weeks old, each one l
on the ground, the margins of
er in an irregular form, then l
in order to make the cocoon
the inclemency of the severe
dition the chrysalis remains t
and until the following sumn

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oth. (Bombyx mori.)

ous insects, this is the most cel-
seful to man, and consequent-
d a notice as the limits of this
generally known, that most of
period of their metamorphosis,
vith a silky web, which forms
ocoon. But it is not, perhaps,
is silk is obtained from the ca-
xtent this most valuable of all
s could be cultivated in this

ind have lived, and could live,
s, and the same might be said
ies; but whoever has witnessed
refinement in manners and cus-

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other brainless people, wo
dor and influence.

Silk has always been an
a curious history. It was
in gold, at Rome. The ex
ered the stage of the theat
the emperor Tiberius prohi
ing silk dresses, because l
The emperors Caligula and
selves throughout in silk ;
lite and so penurious, that
a robe of silk on account c

Kirby and Spence, in tl
mology," mention, that "J
land, was forced to beg of

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ancient Media, as far as to the
s, near Tiflis, the idea occurred
is story of the golden fleece of
ave had its origin, or reference
ry. These beautiful provinces
ssion of Russia, and are called
ey with the Crimea form the
active countries of the Russian

induced my friend Castellas, of
settle in Tiflis, and encouraged
las, in 1826, to erect large es-
ltivation of silk in Tiflis, Kara-
and Imeretia, of which he show-
en I was there, in 1825. In
its, he employed twenty-seven
ing eight hundred Italian men

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once more meeting him
left this world forever, a
establishments have prob
for a country where 1,200
habitants with a rod of i
cannot well, or long succ

It seems to me a matte
ciency in our views of po
ple of the United State
more persevering and suc
silk, for the importation
millions of dollars annual
dividuals here and there,
branch of industry, and
purchase some fine silk h

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ould be made a profitable busi-
middle States of the Union,
any old and infirm men and wo-
en when not in school, and in
ould do the same with negro
th the old men and women who
tated for hard work.
mber of white mulberry trees,
sing silk-worms is neither diffi-
d whoever raises a large quanti-
sure of a ready cash sale of them,

k-stuffs of commerce originate
-worm, but there exist several
arnal Lepidoptera in America
duce silk of a different kind, of
y limited one is made: as for
Bombyx Madrono, mentioned in
hich is found in the province of

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worn out in many years.

In India, silk is also o
other Moths, in relation
say, "Of these, the most
the Tusseh and Arindy
both natives of Bengal.
feeds upon the leaves of
Hindoos, and upon the
the Asseen of the Hindo
dance as from time imm
stant supply of a very
silk, which is woven into
This fabric is much wor
sects, and would be higl
many parts of America,
a light and cool, and at

Digitized by Google

hich is so delicate and flossy
wind it off, like other silk,
therefore, spun like cotton,
nufactured, is woven into a
ı of a loose texture, but of
ɔility than the other, the life
seldom sufficient to wear out
is used, not only for cloth-
cloths. Some manufacturers
silk was shown, seemed to
ɔe made into shawls equal to

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